

Evaluating Opioid Prescription Guidelines for Post Bariatric Surgical Patients: A Quality Improvement Project

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PROBLEM STATEMENT

- Opioid use disorder (OUD) impacts over 2 million individuals within the United States, with 3 to 19% of individuals taking prescription opioids developing addiction.
- The highest opioid prescription rate in the United States occurs following surgical procedures and is far higher as compared to Canada and Sweden.
- The current scientific knowledge regarding the provision of opioid prescriptions following bariatric surgery is insufficient and varies across the country.
- Opioids remain the drug of choice for the treatment of severe pain. However, patients may not be able to differentiate between mild, moderate, and severe pain.

PROJECT PURPOSE

- To decrease the amount of oral opioid prescriptions written by providers and used by patients in a bariatric surgical practice
- Project Aim:** To develop and implement a clinical practice protocol that includes comprehensive patient education and a nonopioid post-surgical pain management.
- Clinical Question:** Does the implementation of a comprehensive opioid safety education and a nonopioid pain management protocol decrease the number of opioid prescriptions written and the opioid requirement for postoperative pain management in a bariatric surgical practice, when compared to current practice?

MODEL/NURSING THEORY

- Plan-Do-Study-Act (PDSA) model guided project design
Four step cyclic process: Testing a change by planning, trying, observing and acting on what is learned.
- Betty Neuman Systems Theory guided the project implementation as the basis of this theory is focusing on wellness (free of pain) by reducing patient stressors (pain)

METHODS

Subjects (Participants)

- Intervention Group: Bariatric surgical patients age 18 and older is scheduled to have laparoscopic bariatric surgery as treatment for morbid obesity
- Comparison group: Patients had bariatric surgery who did not receive the protocol (historical controls).
- Inclusion Criteria: Patients who are scheduled to have surgery at the project time period.
- Exclusion Criteria: Patients exposed to opioids within 30 days prior to bariatric surgery for chronic pain

Setting

- Bariatric surgery private practice

Instruments/Tools

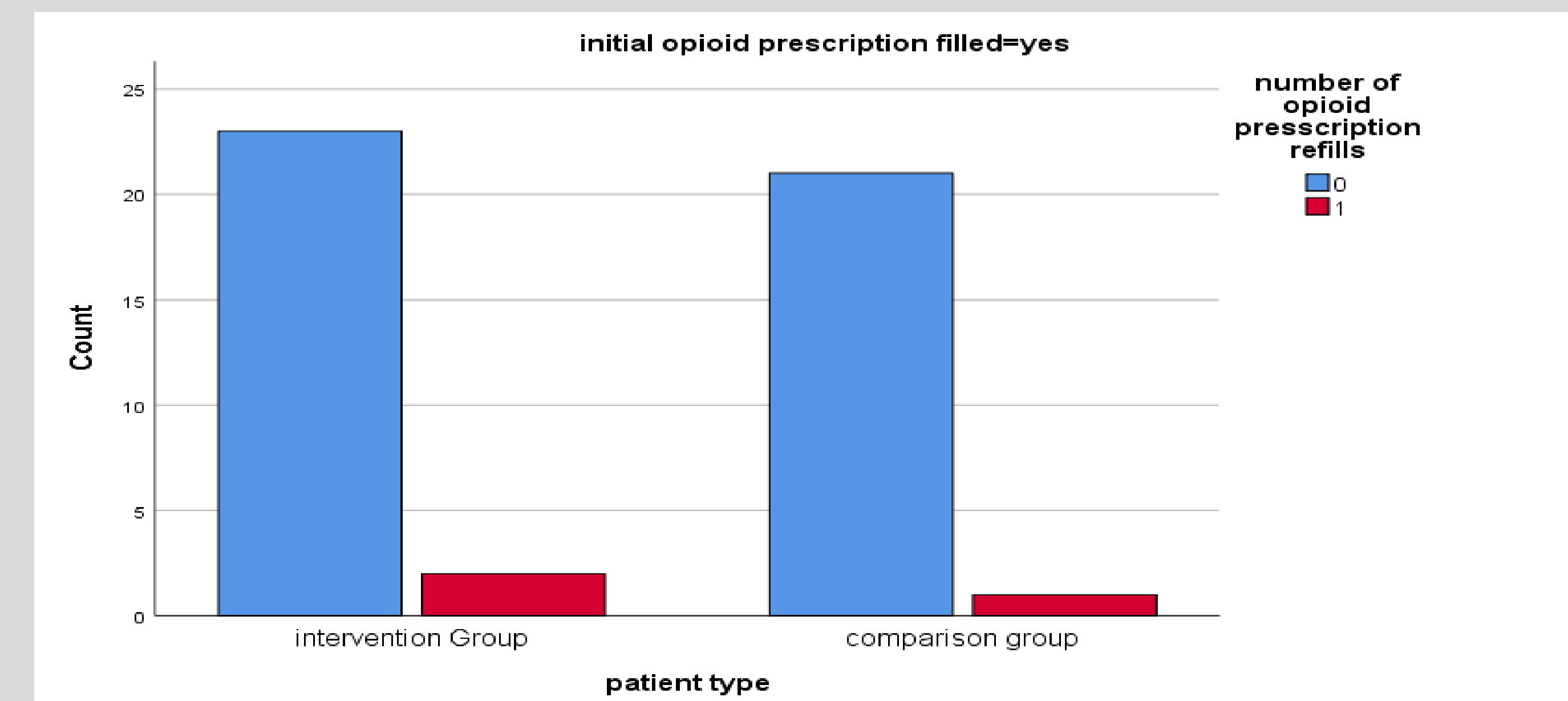
- Postoperative Questionnaire to collect the number of opioid tablets taken at two weeks
- PDMR for number of opioid prescription refills
- Demographic data collection tool were used to collect patients age, gender, BMI, existing comorbidities

Intervention and Data Collection

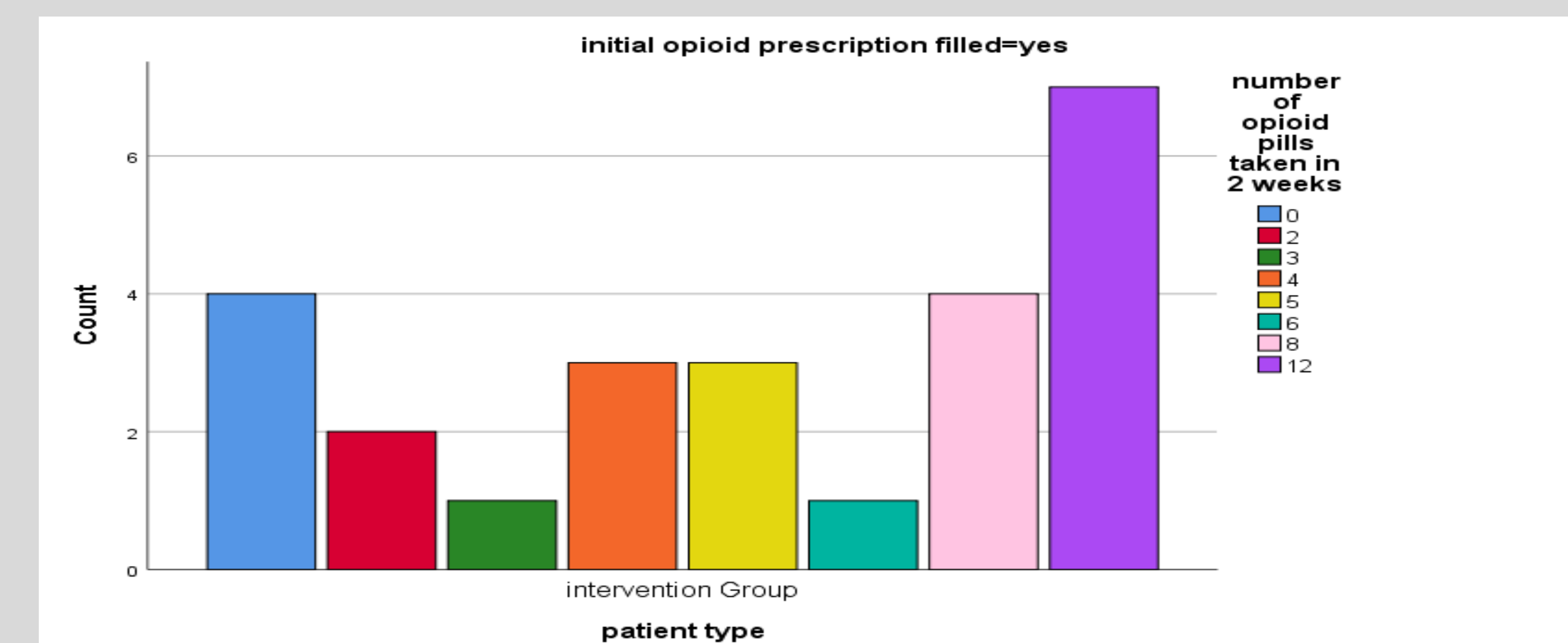
- At the preoperative visit, the implementation of clinical practice protocol consisting of opioid safety education and the use of nonopioids (Acetaminophen) efficacy in treating mild to moderate post surgical pain using a VAS to assist patients in rating their pain and choosing a pain relief option was implemented.
- The intervention were provided by Advance Practice providers and surgical staff.
- The postoperative questionnaire were administered at two weeks postoperative period to collect information on number of opioid tablets and any opioid refills were received, The Prescription Drug Monitoring Report used to validate opioid refills (if they received script from other providers)
- Data were collected over the time period of three months. Jan to Mar'2021 & Retrospective chart review to compare opioid refills prior intervention implementation on patients underwent surgery between (Jan – Mar' 2020)

RESULTS

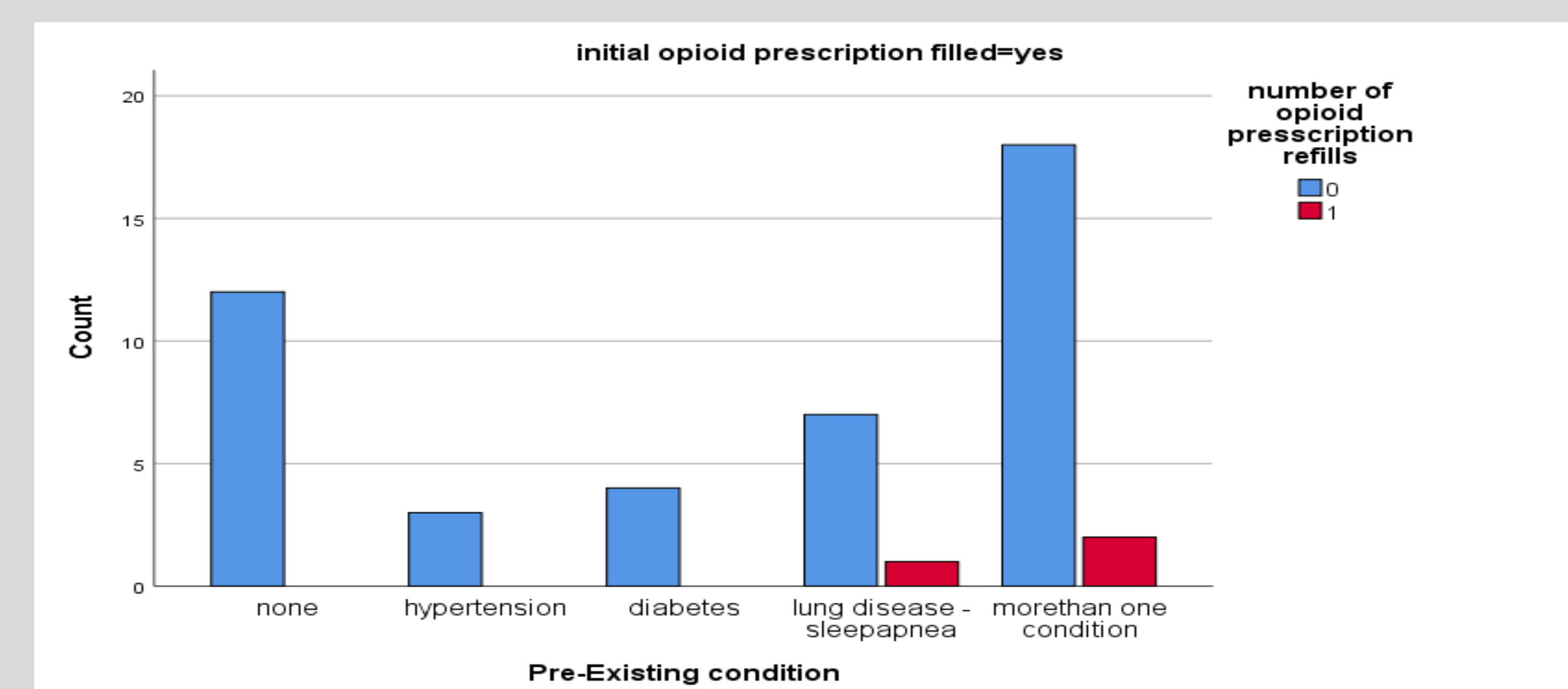
- Actual refills: $p = 0.561$, there is no statistical significance between two groups



- The number of opioid tablets taken in two weeks is approximately 7 tablets



Patients who received refills on opioid prescription are with lung disease and with one or more comorbidities



DISCUSSION

- The development of clinical protocol to lower opioid shows no statistical differences between the groups on the number of opioid tablets taken or refills written.
- The average tablet taken to control postoperative pain was 7 tablets.
- Practice recommendations include changing the current opioid use guidelines following bariatric surgery.
- There is a correlation existing between opioid refills and the number of comorbid conditions. Consider multimodal pain management for this population.

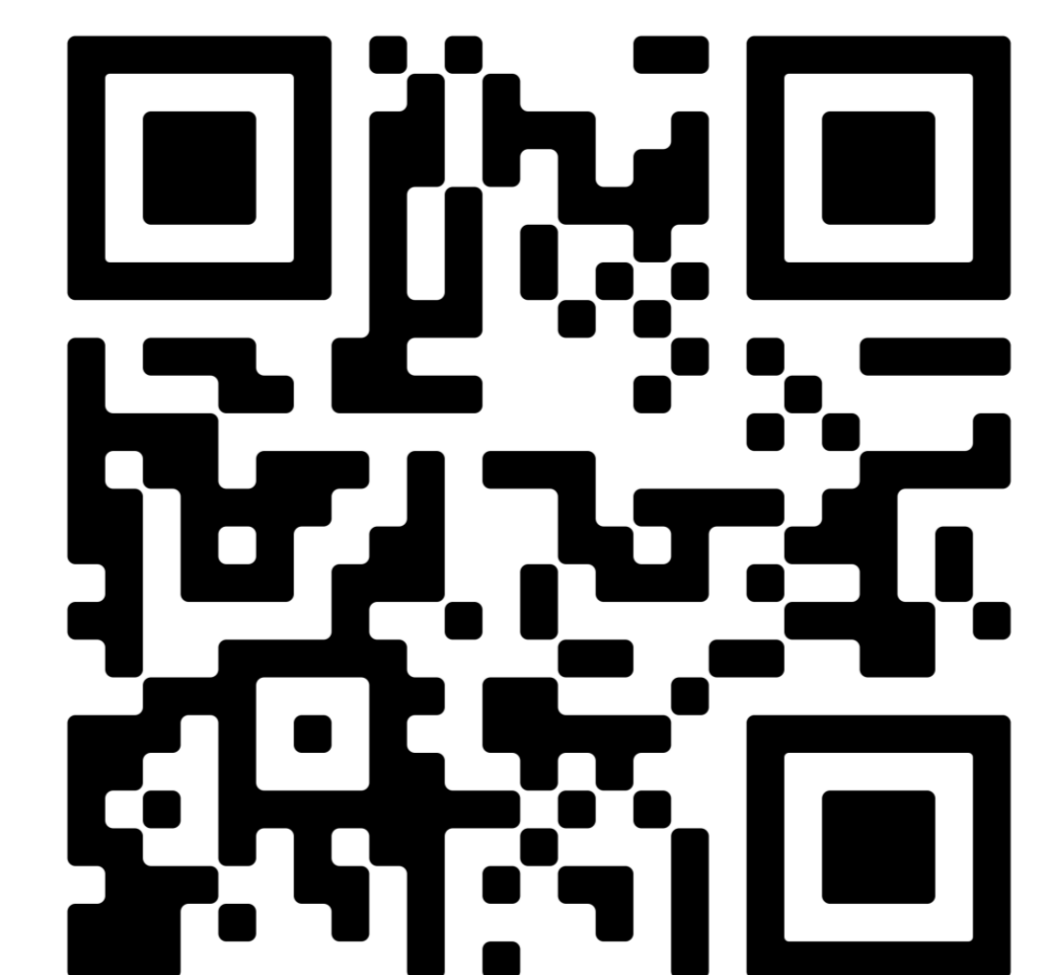
IMPLICATIONS FOR ADVANCE PRACTICE NURSING

- Obese patients are at high risk for developing opioid dependence and misuse. This QI project is significant for potential future impact on bariatric surgical patient outcomes in utilizing comprehensive opioid use education as a means of reducing opioid dependence and misuse.

SUSTAINABILITY

- The project can be sustained through professional development for physicians and advance practice providers in following clinical guidelines, providing comprehensive patient education regarding expected post-operative pain levels, opioid safety and reduction of opioid prescribing.

REFERENCES



Implementation of clinical protocol that includes nonopioid pain management and opioid safety education supports to reduce the number of opioid tablets currently being prescribed for post bariatric surgical patients.